

April 30, 2013

“Everything is funny as long as it is happening to somebody else.”
— Will Rogers

Equity markets have unofficially reached “go-go” status. There are a number of investors following the “buy anything” playbook, and so far this year it is working.

However, the option market is singing a very different tune. Historically, market-moving events correspond with sharp changes in the VIX and VIX spikes often correspond with increased volatility of the VIX itself, commonly referred to as the “vol of vol.” It is interesting to observe the “vol of vol” because it can provide insights into activity and sentiment that are easily overlooked when merely looking at equity returns or even the spot VIX price.

The VIX can be thought of as a proxy for implied risk, a fear gauge, or the general price of portfolio insurance. Traders derive its price by using a strip of short-dated listed S&P 500 option prices. If investors buy enough options, market makers who are selling them will raise their prices and the VIX will subsequently move higher. Conversely, when investors sell their long options and have no interest in hedging, market makers tend to lower prices, resulting in a lower VIX level. Activity in the market varies with every millisecond across a variety of options making the price of insurance, and the VIX, a moving target.

Anecdotally, if the VIX were over 40, most investors would agree that something significant has happened and fear is elevated. A VIX in the low teens might be consistent with complacency and a disinterest in hedging. If we go back through history, we find that most of the high VIX environments are consistent with high periods of “vol of vol”—until now. Despite a cosmetically low VIX price, the current volatility of the VIX is suggestive of crisis.

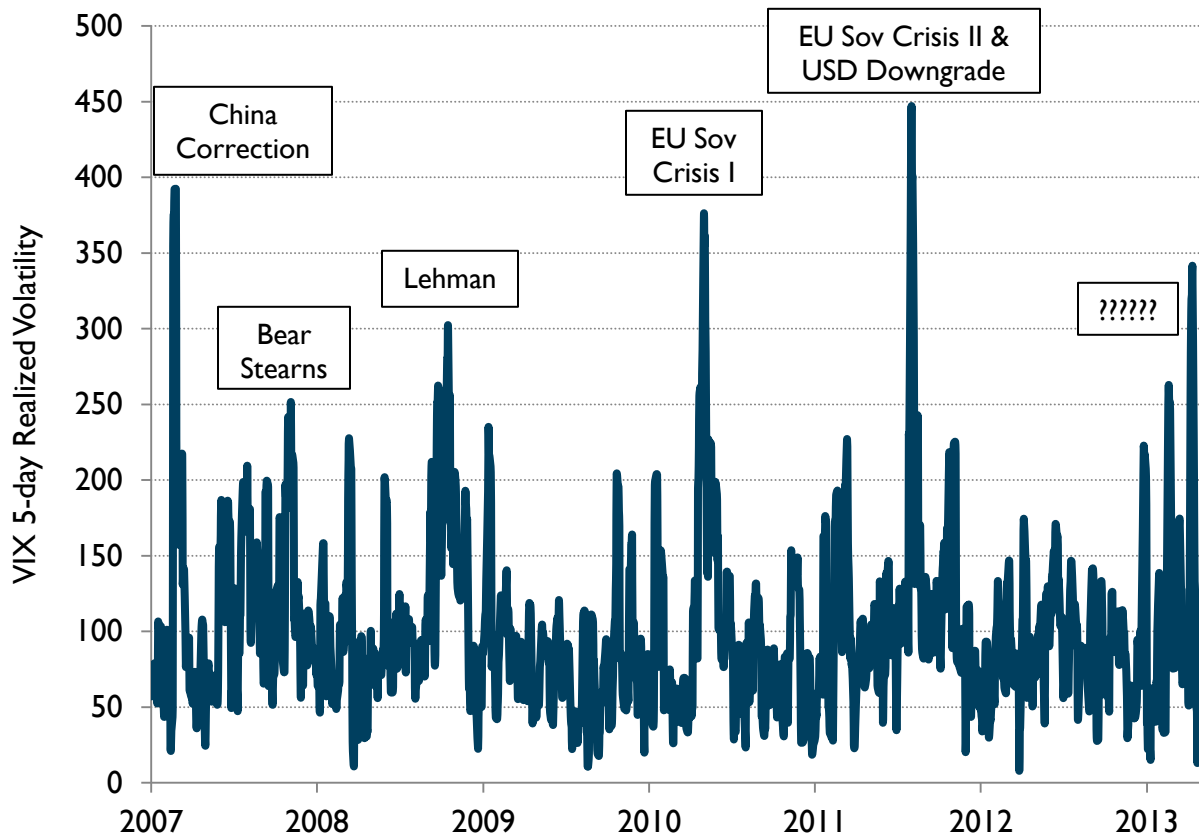


Figure 1: 5-day realized volatility in the VIX. This is a measure of “vol of vol.”

So why is the VIX experiencing extreme movement with a curiously low VIX spot price and an absence of significant underlying equity market volatility? There are several potential explanations:

- 1) *Trading the hedges* – Today, investors are able to “trade” volatility in many different formats. The VIX futures and options, along with the multitude of other exchange-traded volatility products, are commercially viable and depended on for hedging. Investors who use these products are capable of initiating and unwinding positions with minimal friction. Significant liquidity in hedging vehicles encourages investors to trade more frequently than they might otherwise.
- 2) *Muddled macro picture* – While equity markets continue to make new highs, investors are fraught with concern about the laundry list of macro factors. There is at least one major consideration from every asset class or continent that could throw a wrench in what has otherwise been an unscathed bull market run. This induces traders to scrutinize the tape and use a trigger-finger approach to determine “risk-on/risk-off.”

- 3) *Underperformance creates emotion* – Based on the popular hedge fund indices, many professionals are underperforming the broad-based equity markets. This can lead participants to abandon traditional option hedging strategies in favor of option trades that managers use to play catch up. These structural shifts can create movement in the options curve that can lead to volatility in the VIX.

The fact is that option prices are moving violently in the interim regardless of what is shaping up to be one of better equity performances in recent years. We know from experience that these wild periods are generally short-lived. Remaining disciplined during volatile markets is central to our core values.

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